



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,785	10/30/2003	Tetsuo Fujii	01-472	7735
23400	7590	08/30/2005	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			NADAV, ORI	
			ART UNIT	PAPER NUMBER
			2811	

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/695,785

Applicant(s)

FUJII, TETSUO

Examiner

Ori Nadav

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3-7 and 10-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,8,9 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because in line 11, the term "(20)" should read "(10)". Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 8-9 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato (5,773,881).

Regarding claim 20, Kato teaches in figure 7 and related text a dynamic quantity sensor comprising:

a sensor board including a movable portion 22 at one surface side thereof, wherein the movable portion is displaced under application of a dynamic quantity; and circuit board 23 for communicating with the sensor board, wherein the circuit board is disposed so as to confront one surface of the sensor board through a gap portion 29 and to cover the movable portion, and wherein the sensor board and the circuit board are partially bonded to each other around the gap portion.

Art Unit: 2811

Regarding claim 1, Kato teaches in figure 7 and related text a dynamic quantity sensor comprising:

a sensor board including a movable portion 22 (located at the left side of 22) at one surface side thereof and a silicon layer (the fixed end of 22 located above pedestal 24 located at the right side of 22) at another surface side thereof, wherein the movable portion is displaced under application of a dynamic quantity and the silicon layer is separated from the movable portion by an insulator (air is an insulator, and the claimed insulator is the air portion located in the groove 2a (see figure 3) between the silicon layer is separated from the movable portion); and

circuit board 23 for communicating with the sensor board, wherein the circuit board is disposed to confront the one surface of the sensor board through a gap portion 29 and to cover the movable portion, and the sensor board and the circuit board are bonded to each other around the gap portion so that a bonding portion is formed that substantially surrounds the gap portion.

Regarding claims 2, 5 and 8-9, Kato teaches a sensor board and a circuit board are sealingly wrapped by mold material 31, and a lead frame for transmitting electrical signals to an exterior, wherein the sensor board is bonded to the lead frame on another surface opposite to the one surface of the sensor board facing the circuit board, wherein the sensor board and the circuit board are electrically connected to each other by bonding wires 25.

### ***Response to Arguments***

Applicant argues that Kato does not teach a silicon layer separated from the movable portion by an insulator, as recited in claims 1 and 20.

It is noted that this feature (i.e., a silicon layer separated from the movable portion by an insulator) is not recited in claim 20. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With respect to claim 1, Kato teaches in figure 7 and related text a sensor board including a movable portion 22 (located at the left side of 22) at one surface side thereof and a silicon layer (the fixed end of 22 located above pedestal 24 located at the right side of 22) at another surface side thereof, wherein the movable portion is displaced under application of a dynamic quantity and the silicon layer is separated from the movable portion by an insulator (air is an insulator, and the claimed insulator is the air portion located in the groove 2a (see figure 3) between the silicon layer is separated from the movable portion);

Note that the broad recitation of the claim does not require the silicon layer to be insulated or completely separated from the movable portion by an insulator.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2811

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ori Nadav whose telephone number is 571-272-1660. The examiner can normally be reached between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Loke can be reached on 571-272-1657. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2811

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ori Nadav', is positioned above the printed name.

O.N.  
8/26/05

ORI NADAV  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2800